



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,722	07/18/2003	Eric A. Metz	12,535	1574
7590	11/02/2004		EXAMINER	
Mr. William W. Haefliger Suite 512 201 S. Lake Ave. Pasadena, CA 91101			BUGG, GEORGE A	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/621,722	METZ ET AL.
	Examiner	Art Unit
	George A Bugg	2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-38 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-5, 9, 11-21 and 25-33 is/are rejected.

7)  Claim(s) 6-8, 10, 22-24, 34-38 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 18 July 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/18/2003.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 9, 11-21, 25-33 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,392,563 B1 to Paquette et al.

3. With regards to claims 1 and 17, Applicant claims a method and apparatus which require the following limitations: ***"In a control system for controlling traffic signal lights, normally supplied with power from the AC source, the combination comprising a flasher means electrically connectible to the lights to cause the lights to come ON and OFF, repeatedly, an electrical power storage device electrically connectible to the flasher means for supplying electrical power to operate the flasher means when AC source power is not supplied to the traffic control system, and a charging device for charging the storage device when AC power is normally supplied to the traffic control system."*** Column 1, lines 20-26, of the Paquette reference, describes a basic traffic light which employs three lights that are sequentially turned on and off, or controlled, by an electromechanical timing switch or solid state controller, and which are conventionally coupled to a power distribution network, or an AC power source. Column 3, line 64 through column 4, line 8, disclose a method for detecting a true power outage, and further describes normal operation of the

Paquette system, wherein power is supplied to each bulb in the traffic signal intermittently, which is further evidence of a flashing unit. Column 2, lines 1-19, disclose a back-up system, which includes a rechargeable back-up power source, for operating the traffic signal during a power failure. This passage also teaches a primary power source for providing power to the rechargeable back-up power source, or a battery charger circuit (column 2, lines 62-65), during normal operation of the signal.

4. As for claims 2 and 18, column 2, lines 1-19, further teach activating the back-up system, i.e. auxiliary traffic lights, powered by the rechargeable power source, when a power failure has occurred. In other words, the charging device is associated with the lights.

5. With regard to claims 3 and 19, column 5, lines 12-31, disclose the use of a diode, which essentially is a switch, used to prevent reverse voltage and current, or feedback, from the storage device to the AC circuit.

6. As for claims 4 and 20, it has been shown that the invention of Paquette is associated with a traffic signal.

7. With regard to claims 5 and 21, it is the contention of the Examiner, that as claimed, Applicant is describing the process wherein power is switched, or re-routed from a back-up power source to maintain functionality of the traffic signal. Inherently, the Paquette reference teaches switching power from a primary source to a secondary source to maintain traffic signal operation.

8. As for claims 9 and 25, Column 2, lines 1-19, disclose a back-up system, which includes a rechargeable back-up power source, for operating the traffic signal during a

power failure. This passage also teaches a primary power source for providing power to the rechargeable back-up power source, or a battery charger circuit (column 2, lines 62-65), during normal operation of the signal. Inherently, AC power is being converted to DC power for the purpose of recharging the battery back-up system.

9. As for claims 11 and 26, the system of Paquette teaches the use of a battery back up system. Power must be switched from the AC source, when no voltage, or voltage below a predetermined level is detected, to a back up source, such as a battery, to maintain functionality of the system.

10. As for claims 12, 27, and 33 inherently, when a primary power source is reestablished, in a system, a charging circuit routes power to a storage device, for the purpose of recharging it for use in future power failures. Furthermore, switching from secondary to primary power is also taught by the Paquette reference.

11. With regard to claim 13, Column 2, lines 1-19, disclose a back-up system, which includes a rechargeable back-up power source, for operating the traffic signal during a power failure. This passage also teaches a primary power source for providing power to the rechargeable back-up power source, or a battery charger circuit (column 2, lines 62-65), during normal operation of the signal. Inherently, AC power is being converted to DC power for the purpose of recharging the battery back-up system.

12. With regard to claims 14 and 28, column 3, lines 23-34, wherein a plurality of LED light sources are used in a traffic light.

13. With regard to claims 15, 31, and 32, column 1, line 62 through column 2, line 22, disclose the various system elements, which are included within the housing of the

traffic light. Two of which are the LED's, and the controller, or flasher. Furthermore, the charging circuit, and back-up power are also disclosed as parts within the housing.

14. As for claims 16 and 29, column 3, line 64 through column 4, line 8, teach the use of a power failure detection circuit, wherein a power failure is detected when no voltage to any primary side of a bulb in the traffic signal, is detected. Power is then supplied by the battery back up system.

15. As for claim 30, the previously cited passages in column 2, of the Paquette reference, teach a battery back-up system, wherein power from a rechargeable power source, i.e. a DC battery, delivers power to the back-up system, and its components, which include a control means.

16.

### ***Allowable Subject Matter***

17. Claims 6-8, 10, 22-24, and 34-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George A Bugg whose telephone number is (571) 272-

2998. The examiner can normally be reached on Monday-Thursday 9:00-6:30, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George A Bugg  
Examiner  
Art Unit 2636

October 12, 2004



JEFFERY HOFSSASS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600